Impact of service quality and perceived value on the post-purchase intention with the moderating effect of switching cost: An evidence from Pakistan telecom industry

Farhan Mirza[a]* Nabeel Abdul Waheed[b] Sohail Younis Ali[c]
[a]Lecturer University Of Management Technology (UMT), Sialkot , Pakistan
[b] University Of Sargodha, Pakistan
[c] Lecturer University Of Punjab Jhelum Campus, Pakistan
***Correspondence author:** mirzafarhan617@gmail.com

Abstract

This study investigates the relation of service quality with post-purchase intention, the relation of perceived value with post-purchase intention, and moderating effect of switching cost on both the relation of post-purchase intention and service quality and switching cost is also studied as a moderator on the relation of post-purchase intention and perceived value in users of mobile value-added services. Hypotheses proposed in this research are tested through SEM. The responses of mobile value-added services users are very useful for managers of the telecommunication industry to satisfy their customers and to earn more profits from existing customers. This study shows that Pakistani mobile value-added services users are willing to buy a mobile value-added again and again if the service quality of that service delights them. This study also acknowledges that perceived value can also motivate the customer towards the intention of purchasing, again and again, a value-added service. Furthermore, this study proves that switching cost effect the relationship between service quality and post-purchase as moderator, Switching cost also affects the relationship of post-purchase intention and perceived value as a moderator in value-added services of telecommunication industry. This study also gives directions to managers that they should work on switching cost that their consumers may not switch to other telecom companies for the same value-added services

Keywords: Service quality, perceived value, switching cost, post-purchase intention, Pakistan telecom industry

Introduction

Telecom services are worldwide known as a major factor for the economic prosperity of a nation(Ray, 2016). We can also acknowledge

these services as primary support for the swift growth of many imperative divisions of an economy(Shrivastava & Israel, 2010). While discussing Pakistan its telecom sector is also playing an essential role in the development of its economy(Imtiaz, Khan, & Shakir, 2015). The use of cell phones in developed countries of the world has increased allot and this increase is also at extreme pace in developing countries of the world(Economides &Grousopoulou, 2009). In this era, nearly everyone is a user of cell phone services in developed and undeveloped economies (Lim, Yeo, Goh, & Koh, 2018). The old dated wire telephone use is rare now a day, in last few years the cellular industry has grown rapidly and this industry has also introduced many technologies and these technologies have to make cellular communication easier, The technologies introduced by cellular industry are also beneficial for other industries of an economy (Eissa, Elmesalawy, & Hadhoud, 2015). Cellular communication market has grown rapidly; mobile phone devices were exclusively created for business purpose but now cellular phones have become a basic need of our daily life(Olla & Patel, 2002). In Pakistan, 66.6% population owns there personal mobile phones for daily communication and other cellular-related operations purpose(PTA, 2017). Four companies are giving their services to customers in Pakistan namely: **1)**Mobilink with 52,720,636 subscribers, **2)** Telenor with 40,441,316 subscribers, **3)** CMPak with 28,475,681 subscribers and **4**) Ufonewith 18,333,129 subscribers (PTA, 2017). All these companies are trying to increase their subscribers(Tariq, Awan, & Ghouri, 2014). All these cellular companies also try to give the best services to achieve the loyalty of users and by gaining loyalty they can increase the stability of the users of their services (C.-F. Chen & Cheng, 2012).

The first rationale of this study is the gap of a previous study, done in the field of mobile value-added service of Taiwan by (Kuo, Wu, & Deng, 2009). To gain more business and profitability from the same or existing customers the cellular companies need to introduce more attractive and useful services to their existing and new customers. The introduction of these services is not only important for existing customers but also important to attract new customers.

All telecom companies in Pakistan are providing VAS services to their customers to improve their bindings with customers and to increase their profitability. These VAS services provided by the telecom industry

are also beneficial for customers as they can get many benefits from these services.

There are very few studies that have discussed the quality of the services provided by telecom companies in Pakistan (Khan, 2010). Moreover, this study also investigates the PPI of mobile VAS in Pakistan. In this research, study researchers highlighted the importance of the telecommunication industry for companies, customers, and the economy of Pakistan. The relationship among SQ and PPI of mobile VAS users will be investigated in this study, the relationship among PV and PPI of mobile VAS will also be investigated. More above the moderating effect of SC on both above-discussed relations will also be investigated.

Research Objectives

The research objective of this study is to develop a model to find out a relationship between SQ and PPI, the relationship between PV and PPI and the moderating effect of switching cost on both relations:

1) To determine the relationship between SQ and PPI in users of mobile VAS.
2) To determine the relationship between PV and PPI in users of mobile VAS.
3) To determine the moderation effect of SC on the relationship of SQ and PPI in users of mobile VAS.
4) To determine the moderation effect of SC on the relationship between PV and PPI in users of mobile VAS.

Underpinning Theory

1) A conscious effort was done by Homans in 1958 to identify social exchange theory and he had provided the basis to this theory(Homans, 1958) after him Blau's in 1968 gives the approach that social exchange theory is having potential in economics and psychology field in future(Blau, 1968). He also explains that If there is no social relation between two or more individuals then nothing can be exchanged in them, so it's compulsory to have some social interaction to exchange social or material resources.

In services industry trust can be developed between the cellular company and customer if the customer is satisfied with service provided by

the company (Jou, Wu, Chang, & Feng, 2005). A satisfied customer will become loyal to the service provider and will intend to use and purchase that service again (Hallowell, 1996). There is too much emphasis on intention in many studies that the intention is the best representation of the repurchase behavior of customers(Jia et al., 2007). Trust and satisfaction of customer lead towards the intention of purchasing again or leads towards the post-purchase intention(Hsin Chang & Wen Chen, 2008). As a theory of social exchange demonstrates that whenever a customer and supplier will going to have interaction some social or material exchange will occur, likewise whenever a mobile value-added user customer will use the service he will develop an intention to post purchase that service again or not as result of the service quality and its value.

2) The theory of planned behavior was introduced by Ajzen (1985). This theory focuses on attributes such as norms, perceived control of the behaviour, attitude toward behavior, all these characteristics shape an individual's behavior or intentions towards a specific condition (Ajzen, 1985). If suggested behavior is evaluated by people as a positive attitude, and they also think that others should also perform the same behavior this results in motivation and higher intention. Many studies have confirmed an attitude of high correlation towards behavioral intention, and moving towards a specific behavior is also confirmed (Sheppard, Hartwick, & Warshaw, 1988).

In recent times organizations have significantly adapoting customer centric behaviour from product and service-centric appraoch(Khan, 2019). The theory of planned behavior is about the relationship between attitude and beliefs. According to models discussed in different researches explain that people have a specific attitude towards behavior which is determined by their beliefs. Belief is a subjective probability that is produced by the behavior as a certain outcome. The evaluation of the outcome is known as an attitude or a specific behavior which a person is going to produce as a result of his attitude(Ajzen, 1985; Fishbein & Ajzen, 1975)

Review of Literature

Service quality

In the 1980s to increase the customers and to increase business share the element of SQ got great attention, SQ element was also

considered as a fundamental reason for organizations' success(Buzzell & Gale, 1987). The researchers also found that dissatisfaction from SQ is the difference between their expectations and the original SQ(Tse & Wilton, 1988). In the 1990s the researchers had started developing models to know the factors which can affect the perception of customers about the SQ (Boulding, Kalra, Staelin, & Zeithaml, 1993).

When researchers discuss the performance of the companies then organizational performance, in the long run, depends on the quality of its services and products(Ali & Raza, 2017). SQ is known as the variance between customer expectation about service and perceived performance of service(Parasuraman, Zeithaml, & Berry, 1988). Previous studies have shown that if your service quality is good then it will upturn customer satisfaction and it also helps to the retention of customers and the service quality is also an attraction for new customers (Ali & Raza, 2017).

PPI is a force inside a customer that he or she will buy the same service or product at a similar shop and convey their findings of that service to others(Kuo et al., 2009). The intention of purchasing, again and again, service or product by a customer from a similar firm or the same source is known as repurchase intention(Hellier, Geursen, Carr, & Rickard, 2003) and the reason behind this purchase is his experience. To evaluate PPI Boulding et al. (1993) used the term word of mouth (WOM) and the term repurchase intention.

Service quality or customer care is very vital for any organization because it is the reflection of customer retention (Interventions et al., 2000). Overall service quality is the trafficking of information between customers and the company(Y.-W. Kim et al., 2008). The information trafficking is done through the reaction of customer's questions via electronic mail, phone call, or through direct interaction with industry (Gerpott, Rams, & Schindler, 2001).

Numerous studies have determined that SQ has a major role in customer's intentions for repurchase. Hence all elements under the umbrella of service quality need to be fulfilled for impact on retention of customers and his post-purchase intention (Santouridis & Trivellas, 2010; Woo & Fock, 1999).

Thus, Hypothesis 1 is proposed as follows:

H1: SQ positively influences the PPI in customers of mobile VAS.

Perceived value

Perceived value (PV) is a compromise that encompasses a sacrifice that must be made to obtain a certain artifact or experience i.e.; what customers will receive, such as services, perks & benefits by sacrificing certain things like effort, cost & price(Gallarza & Saura, 2006; Keeney, 1999; Zeithaml, 1988).

The PV is also defined as a relationship of the trade-off between benefits that a customer or consumer has perceived and money and time sacrificed by the customer(S. H. Kim, Holland, & Han, 2013). So, PV is in actual a reflection of the customer's intention that how much he wishes to pay for the service or product that is being offered by an organization. The less appealing value of a service, the negative results, and the more energy required to get the benefit from a service, and then the PV will be lesser. The more important thing is to note that PV is a subjective matter which just means that it is dependent upon a prospect's present situation that how much the offer will affect his values and believes and what the customer will have to pay for it. Perceived value can be increased by focusing on lending the most substantial interests and the highest rank in a way that needs the least amount of prospect's energy and frustration(Kaufman, 2011).

PPI is almost the goal of every business to increase its customers and the willingness of the customer to buy the same product again and again from the same source(Engel, Blackwell, & Miniard, 1993). In online shopping, the PPI is the probability that a customer will be going to purchase the same service from the same online vendor in the future(Chiu, Chang, Cheng, & Fang, 2009). Marketing staff and corporate managers in recent years have used PV to evaluate consumer's PPI which was ignored in previous researches(Andreas & Wolfgang, 2002; C.-H. Lin, Sher, & Shih, 2005). (Patterson & Spreng, 1997) confirmed in his study that PV is a performance dimension of post-purchase intention.PV is known as one of the most significant elements of PPI(Petrick, 2002). When we inspect the relationship between PPI and PVIt was considered by many scholars that PV has direct positive effect on PPI (Andreas & Wolfgang, 2002; Eggert & Ulaga, 2002; C.-H. Lin et al., 2005; Patterson & Spreng, 1997).

While doing a cross-industrial research(Cronin et al., 2000) found that PV is having positive effects on PPI.(Y. Wang et al., 2004)Engrossed on telecommunication industry of China and also favored the positive influence of PV on PPI of customers. (H.-H. Lin & Wang, 2006)In a study done in the field of mobile commerce which was conducted in Taiwan,

researchers also concluded that PVhas a positive influence onPPI of customers towards mobile services.
Thus, Hypothesis 2 is proposed, as follows:

H2: PV positively influences PPI in customers of mobile VAS.

Switching cost as moderator:

Switching cost (SC) is an ongoing onetime cost that is associated with the repeat purchase relationship of a specific commodity or service (Porter, 1998). SC is a one-time cost that is associated with the customer's process of changing the service or product provider, switching process should be immediate mean customer must have to switch to other products or services to complete the switching process. Additionally, the switching process should be based on economic reasons or the cost comparison reason for one service to another. The switching process of a consumer or customer can be one time due to some promotional activities of a competitor company. SC is important for service and product manufacturers because customers consider SC in the buying process or in the intention of buying a product(Burnham, Frels, & Mahajan, 2003).

When a customer changes supplier of a product or service from one to another and the cost which he bears to change the supplier is known as switching cost (SC) (Investword, 2018). If switching cost is higher than the current service cost then it's difficult to switch suppliers of a product(Investword, 2018). In consumer markets switching cost has made significant practical and theoretical interest(Jones, Mothersbaugh, & Beatty, 2002).

Switching cost specifically has a momentous influence on repurchase intention or PPI(Jones et al., 2000, 2002), and switching cost is also a precedent of switching behavior and intentions (Bansal & Taylor, 1999). In the context of retail banking, (Beerli, Martin, & Quintana, 2004)reveal that SC of the customer is a precedent of loyalty.
Switching cost occurs when a buyer is switching himself/herself to other products and the cost which he bears to switch products or services is known as switching cost(Porter, 1998). In research done in Turkey concluded that switching cost is influencing loyalty positively and loyal customers are having the intention to buy the product again(Aydin & Özer, 2006). Studies have shown that switching cost influences customer loyalty

and loyalty can positively influence post-purchase intention(Hellier et al., 2003; Sharma & Patterson, 2000).

SC is famously known as a significant determinant of the loyalty of the customers (Jones et al., 2000). Customer loyalty is dependent on the switching cost of a product or service (J. Lee et al., 2001). If the switching cost is high then customers will not be going to switch to other telecom service providers freely even if they are facing any problems or dissatisfied with their current service provider (Burnham et al., 2003). The customers will prefer to stay with their current service provider if the switching cost is high and customers are not able to pay that high switching cost (Lam et al., 2004). Many studies have supported that SC can weaken the link between CS and customer loyalty and customer retention(Ranaweera & Prabhu, 2003).

Perceived SQ, perceived product quality, perceived price fairness, and customer satisfaction are determinants of customer loyalty(Bei & Chiao, 2006). Switching costs can act as moderating variables in loyalty determinants of services or products such as SQ, PV, and CS(C.-F. Chen & Chang, 2008). Thus, Hypothesis 3 (a) and 3 (b) is proposed, as follows:

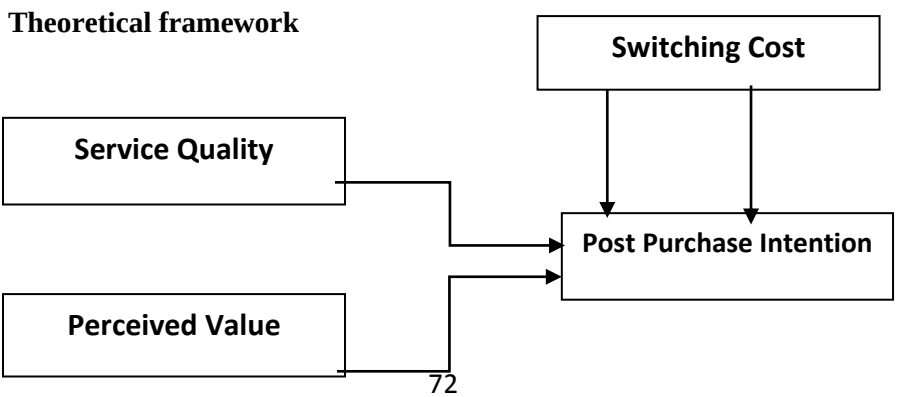
H3 (a): SC moderates the relationship of SQ with PPI in mobile value-added services.

H3 (b): SC moderates the relationship of PV with PPI in mobile value-added services.

Methodology

The above hypothesis was tested through a survey of 350 mobile VAS users. The data collected technique used in this study is non-probability convenience sampling. 350 Questionnaires were distributed among the respondents 64 were incomplete among the distributed questionnaires and 286 were considered for the further research process, so the response rate of this study is 81.7%.

Theoretical framework



The respondents of this study were employees of different public and private sector companies and students of the public and private sector were also involved. In this study, the technique which is used to collect data is non-probability convenience sampling, the survey method is used by getting a response from mobile value-added services users through a questionnaire.

Data Analysis

Descriptive statistics (Demographics)

This study was conducted in the last quarter of 2019, Overall, 286 responses were correct and taken for data analysis. The response rate of this study is 81.7%.

Table 1 (Demographics)

Demographical Characteristics	Groups	Frequency	Percentage
Age	18-25	169	59.1
	26-33	76	26.6
	34-41	40	14.0
	41 above	1	0.3
Gender	Male	159	55.6
	Female	127	44.4
Education	Intermediate	137	47.9
	Graduation	105	36.7
	Master	43	15.0
	Other	1	0.3
Experience Level	0-5	219	76.6
	6-10	64	22.4
	11-15	3	1.0
	Other	0	0.0

Reliability Analysis

Table 3

Constructs	Cronbach's Alpha
Service Quality	0.769
Perceived Value	0.614
Switching Cost	0.662
Post-purchase Intention	0.745

Reliability is a technique to check the consistency and stability of measurement tools. For this Cronbach's alpha is used to access the reliability. The recommended value for Cronbach's alpha is 0.60 (Gliem & Gliem, 2003). it can be seen from Table 3 that the constructs used in this

study are reliable because all values of Cronbach's alpha are above the threshold value which is 0.60.

Correlation **Table 4**

Construct	Mean	SD	A	SQ	PV	SC	PPI
SQ	3.50	.59	.769	---			
PV	3.67	.74	.614	.57**	---		
SC	3.59	.72	.662	.53**	.52**	---	
PPI	3.63	.84	.745	.53**	.61**	.55**	---

***P<.01; Pearson-two tailed, SD= Standard Deviation, α =Reliability, SQ= Service quality, PV= Perceived value, SC= Switching cost, PPI= Post-purchase intention*

Table 4 explains the correlation between the variables of this study. It is observed that all variables are highly correlated with each other. The highest correlation is found between PPI and SC which is 0.61. It is found that correlation between SQ and PV is 0.57, the correlation between SC and SQ is 0.53, the correlation between PPI and SQ is also 0.53, the correlation between PV and SC is 0.52 and correlation between PPI and SC is 0.55.

Path Analysis **Table 5**

	Estimates	S.E.	P
PPI ⬅ SQ	.32	.201	0.000
PPI ⬅ PV	.96	.291	0.000
CMIN/DF=1.988, GFI=0.88,	CFI=.087, RMR=.07	RMSEA=0.059	

The above table shows the regression weights and significant level of hypothesis relationship. This table explains results about the two hypotheses of our study H1, H2 respectively. The result of this table provides evidence that SQ has a positive significant impact on PPI and the p-value is also less than 0.05. The relationship among PV and PPI is also positive, PV is having a positive impact on PPI and the p-value is also less than 0.05. SEM analysis exhibited positive estimates and S.E about independent variables to the dependent variable.

Moderation

Table 6

Model Fit	CMIN/DF	GFI	CFI	RMR	RMSEA
Moderation 1	7.38	.99	.995	.02	.054
Moderation 2	8.68	.98	.994	.01	.064
Structural Relation			Estimates	S.E	P-Value
SQ→PPI			.044	.121	0.653
Int.term→PPI			.686	.132	0.000
PV→PPI			.159	.098	0.133
Int.term→PPI			.628	.121	0.000

Table 6 exhbhit the moderation results of this study. The fourth and fifth hypotheses postulate the moderating effects of SC on PPI through SQ and PV. Table 6 shows the results of moderation on hypothesis number 3 (a) the table shows us that GFI value is .99 and CFI value is .995 which means that the model is fit. The RMR value is .02 and the RMSEA value is .054 both values predict that there is a minimum error in this moderation, so we can say that this moderation is fit and error is also below the threshold level. This table also shows that the interaction term is significantly positive which means that our hypothesis is approved.

Moderation on hypothesis number 3 (b) the table shows us that GFI value is .988 and CFI value is .994 which means that the model is fit. The RMR value is .011 and the RMSEA value is .064 both values predict that there is a minimum error in this moderation, so we can say that this moderation is fit and error is also below the threshold level. This table also shows that the interaction term is significantly positive which means that our hypothesis is approved.

Goodness of fit

Table 7

Factors	**Goodness of fit**
Service Quality	GFI=.884
Perceived Value	CFI=.889
Switching Cost	RMR=.064
Post-purchase intention	RMSEA=.051

Table 7 explains the values of the goodness of fit and error. GFI and CFI values are explaining the fitness of the model and the value of GFI and CFI should be greater than 0.7. In this study the value of GFI is 0.884 and CFI is 0.889, these results show that our model is fit because its values are

greater than 0.7. This model is an absolute fit as both values are close to 0.9. This table also explains about the error falls in this model. There should be a minimum error in the model to prove its fitness. Minimum error is another dimension to look at the fitness of the model, in a model the values of RMR and RMSEA explain the error falling in the model. The value of RMR should be less than 0.08 and the value of RMSEA should be less than 0.07. In the results of our study, the value of RMR is 0.064 which is less than 0.08 and the value of RMSEA is .051 which is also less than 0.7 so, this proves that our model is having a minimal error. As we already had discussed that minimum error is also a scale to measure the fitness of the model so, our model is fit that this has a minimum error.

Discussion and Conclusion

In the current study researchers examine the relation between SQ and PPI and the relationship between PV and PPI in mobile VAS. This study also investigated the moderating effect of switching costs on the relationship between service quality and PPI in mobile VAS. Furthermore the moderating effect of switching cost on the relationship of PV and PPI in mobile VAS. As mobile service users are increasing day by day in Pakistan with the phenomenal rate the competition among mobile service providers is also increasing to have more customers and to have more profit. In every service industry like telecommunication increase in customers also increases the chances of selling more services to new customers and earning more profits from them. Being a telecommunication company if you have more percentage of customers while comparing with other competitors it means that the company is having more chances to sell VAS to its customers than there competitors. Mobile value-added services are new horizons for telecommunication organizations to earn more profits from the same customers so, organizations wish that customers should buy their value-added services again and again but for repetition of buying services the quality of services plays major role and satisfaction of customers from these services also play a major impact in repeat buying of these services. Better service quality can force a customer to buy a value-added service again and again. Positive perceived value can also lead a customer towards post-purchase intention. After using a service if service quality is good and the customer is satisfied then he will buy that service, again and again, likewise, if the value which a customer receives from a service delights him then he will buy that service again and again. By this customers will become loyal. If a customer finds the same service from

other service providers at a low price then there is a chance that customers may switch to another service provider. So it's important to focus on switching costs to make the customer satisfied with service quality and perceived value. The telecommunication industry is facing very tough competition to retrieve customers as every telecom company is providing the same services to customers, so making your customers satisfied is a challenge for every telecom company because customers also compare cost while comparing VAS quality. Switching cost is also a very important factor to monitor by telecommunication companies to hold their customers, to get new customers, and to earn better profits which is the ultimate goal of every company.

The rationale behind this study was to investigate the relation between SQ and post-purchase intention and the relationship between PV and post-purchase intention. This study also investigated the moderating effect of switching costs on the relationship between service quality and post-purchase intention. Furthermore the moderating effect of switching cost on the relationship of perceived value and post-purchase intention. This study was conducted in major cities of Punjab and data was collected from mobile VAS users. This study focuses on the responses of users of different mobile value-added services. This study result has exhibited that there is a positive relationship between SQ and PPI of mobile value-added services, if service quality is good then the post-purchase intention will increase. This study also reveals that perceived value has a positive effect on post-purchase intention in mobile value-added services users. This study reveals that in telecom industry in Pakistan can boost their sales and profits by providing VAS to their targetd customers but the quality of these services can play a trigger role in post-purchase intention of customers. One major moderating factor affecting post purchase intention in this study is switching costs. Switching costs can moderate the relations as if the same services are available with the same attributes then customers may shift to other service providers for that specific value-added service. This study also shows that telecommunication companies cannot hold customers or cannot add new customers to their businesses by only improving service quality or perceived value but they also have to focus on switching cost as customers also compare price which they pay for to use the specific service, many customers also keep looking for substitutes of services on cheaper prices with the same quality and once you lose a customer it's difficult to get him back.

Implications and recommendations

Implications and recommendations for managers are discussed as under:

- Managers can retrieve their customers by continuing good SQ and improving SQ of mobile VAS. Good service quality will force customers to buy that service again and again which will improve their profitability.
- PV is also an important factor for managers to focus that they should improve this for the post-purchase intention of their customers. The positive influence of perceived value will engage the customer to buy service again and again which will improve profitability.
- Managers should also have an eye on competition if competitors are providing the same services with low prices then they might switch to them. So, they should work on SC to keep engaging their customer.

This study is very useful for telecommunication service providers as they can retrieve their customers by providing them better and cost-effective mobile value-added services. As we already have discussed in this study that now telecommunication companies are focusing on mobile value-added services to increase profitability with their current customers. So if companies start focusing on the quality of their VAS then they can increase their profitability. Another dimension discussed in this study is switching cost so, if companies also focus on the cost which they receive from their customer in the competitive scenario then they also can have customer sustainability and profitability increment. The usage of value-added services is also important because many customers are using these services daily which means that the value of these services is daily profitability matter of a service provider.

This study also has value for mobile value-added customers. This study will enforce service providers to improve their services to satisfy their customers. Service providers will also reduce their prices or they will set prices competitively for their services. As value-added services have a future for both customers and service providers so, both will be investing in these services in the coming future.

Limitations and Future Directions

In this study, we tried our level best to eliminate the problems, but still, there are some limitations in this study that can be avoided in the future. In this study cross-sectional method is used to get data from respondents. The cross-sectional technique is used due to resource and time constrain. So, data is collected at once from respondents and the sample size is also small. This sample size will not represent the total population of Pakistan. In the future to overcome this limitation, a longitudinal study can be done and a study in which data could be collected throughout Pakistan with a large number of the sample can also be done. This study only represents the results from Punjab province and its results only represent the responses of users of this province. In future studies can be done to compare the province wise performance of service providers.

This study was done from cities of Punjab province due to time and resource limitations so another study can be done in other cities, provinces, and from other countries to evaluate and comparison the results. In the model of this study, Customer satisfaction can also be used as a mediator for future studies. The Moderator of this study is Switching Cost; Switching Cost is discussed generally in this study but in future studies can be done with the moderating effect of high switching cost and low switching cost.

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